

Work Permit # SDD-2016-020
Work Order # \_\_\_
Job# \_\_\_ Activity# \_\_\_

See "Instructions for Filling out the Work Permit" contained in the Work Planning and Control for Experiments and Operations Subject Area.

1. Work request WCC fills	tanding Work Permit															
Requester: Don Lynch	2253	Group: PO/PH	O/PHENIX													
Other Contact person (if different from requester): Carter Biggs							Ext.: 7515									
Work Control Coordinator: Don Lynch Start						Date: 6/15/2016 Est. End Date: 9/1/2016										
Brief Description of Work: Rem	oval of PHE	NIX north a	ınd south E	BBC's												
Building: 1008	soutl	pment: PHENIX north and Service Provider: PHENIX Techs, Engineers & Subsystem Experts, PHENIX Electrician, C-A Carpenters and Riggers														
2. WCC, Requester/Design	nee, Servic	e Provid	er, and E	SSH (as	neces	sary) fill out th	is section o	or attach a	nalysis							
ESSH ANALYSIS				_												
Radiation Concerns				☐ Air		Contamination	Radiation			□ NORM			☐ Other			
☐ Special nuclear materials inv			pecial Mate			☐ Fissionable/I							ty Officer			
Radiation Generating Devices:							☐ Soil Density Gauges		X-ray Equipment							
Safety and Security Concerns		None			Explosives		☐ Transport of Haz/Rad M		Rad Material			rized Systems				
Adding/Removing Walls or Roofs		☐ Critical Lift [			Fumes/Mist/Dust*		☐ Magnetic Fields*			Railroa						
Asbestos*		Cryogenic			Heat/Cold Stress		☐ Nanomaterials/pa		rticles*		Rigging					
Beryllium*		☐ Electrical		_   □ ŀ	Hydraul	ic	☐ Noise*				☐ Silica*					
Biohazard*		⊠ Elevated Work		L	☐ Lasers*		☐ Non-ionizing Radiatio		ation*	☐ Security Concerns						
☐ Chemicals/Corrosives*		☐ Excavation			☐ Lead*		☐ Oxygen Deficiency*		<b>/</b> *	☐ Suspect/Counterfeit Ite			erfeit Items			
☐ Confined Space*		☐ Ergonomics* ☐			Material Handling		☐ Penetr	☐ Penetrating Fire Walls		☐ Vacuum						
Ladder Access Required:   Po	rtable Ladde	er 🔲 Fix	ed Ladder	– Status/F	Restricti	ons:										
* Safety Health Rep. Review Req	Haz, Rad, Bio Material Excee			ceed D	OE 151.1-C Level	E 151.1-C Levels - Contact OEM			☐ Other							
<b>Environmental Concerns</b>					ne	mpacts Envi	pacts Environmental Permit			i No.						
☐ Atmospheric Discharges (rac				stitution	al Controls	☐ Soil Ad			T	☐ Waste-N	lixed					
☐ Chemical or Rad Material Sto	orage or Use						☐ Waste			T	☐ Waste-F	Radioa	ctive			
Cesspools (UIC)	□ PCB Manage					☐ Waste-Hazardous				☐ Waste-Regulated Medical		ed Medical				
☐ High water/power consumption	☐ Spill potential				=		e-Industrial			☐ Historical Enviornmental Hazards						
Waste disposition by:										Other						
Pollution Prevention (P2)/Waste I	Minimization	Opportuni	tv: 🛛 No	☐ Ye	s	Environme	ental Preferat	ole Products	Available:	No	☐ Yes					
FACILITY CONCERNS		⊠ None	-		□ Inte	ermittent Energy R	Release									
☐ Access/Egress Limitations			rical Noise				ial to Cause a False Alarm				☐ Vibrations					
☐ Credited Controls (Use USI Process) ☐ Configuration Management		☐ Impacts Facility Use Agreement					☐ Temperature Change				Other					
		☐ Maintenance Work on Ventilation			Systems	☐ Utility Interruptions										
WORK CONTROLS																
Work Practices																
None									☐ Spill Containment				Security (see Instruction Sheet)			
☐ Back-up Person/Watch					_			Time Limitation		Ħ						
☐ Barricades							=	☐ Warning Alarm (i.e. "high lev			☐ Electrical Inspection Required		ection Required			
Personal Protective Equipm				Coarroid	mg roq	o mopodion		1971101111 (1.0	. mgm 10 vor /			ai iiiop	- Cotton Noquillou			
□ None	☐ Ear Plugs			Gloves, as necessary		☐ Lab Coat			T	☐ Safety Glasses, where req'd						
Coveralls		☐ Ear Muffs			Goggles		☐ Respirator*			-	☐ Safety H	Harness				
				l Hat				Safety Shoes as					_			
☐ Disposable Clothing	☐ Face S	Face Shield as req'd			∐ Sho	oe Covers	req'd	☐ Higl	☐ High visibility cloths/vest ☐ Other							
Permits Required (Permits must	t be valid wh		,													
						pair Fire Protection Systems										
☐ Concrete/Masonry Penetration	_ 33 3 4 4 3 4				Work Permit-RWP No											
☐ Confined Space Entry		☐ Electr	ical Working	Hot	☐ Oth	er Confined Space 2A certification										
Dosimetry/Monitoring																
⊠ None					☐ Rea	eal Time Monitor			☐ TLD							
☐ Air Effluent		☐ Noise Survey/Dosimeter			☐ Sel	f-reading Pencil D	osimeter	imeter			aracterization					
☐ Ground Water		O <sub>2</sub> /Combustible Gas			☐ Sel	Self-reading Digital Dosimeter			☐ Other							
☐ Liquid Effluent		Passive Vapor Monitor			Sor	Sorbent Tube/Filter Pump										
Training Requirements (List	specific train	ning require	ements)													
				fety I, LO	TO as a	appropriate										
PHENIX Awareness, C-A Access	Work screening has identified the following as the reason for permitted							When work is categorized as worker planned work and a permit is used only the following signatures are required: ( Although allowed, there is no need to use back of form)								
	-	g as the re	eason for p	permitted					llowed, there	is n						
Work screening has identified work:	-	g as the re	eason for p	yeriiiitteu					llowed, there Date							
Work screening has identified work:	-	g as the re	eason for p	Jerimitea		signatures are	e required: (			):						
Work screening has identified work:	-	g as the re	eason for p	Johnston		wcc:	e required: (		Date	e: e:						

3. Both work requester and service provider contribute to work plan (use attachments for detailed plans) Work Plan (procedures, timing, equipment, scheduling, coordination, notifications, and personnel availability need to be addressed in adequate detail): During the 2016 PHENIX R&R Shutdown. PHENIX will be performing R&R work to prepare for a new sPHENIX detector. As part of this effort, it is required that the BBC north and south detectors be removed and moved to a safe location at 1008 or 510 to await final dispositioning... This set of tasks has been performed successfully several times during previous PHENIX Shutdown periods. The specific procedure details are contained in PHENIX procedure "BBC Installation & Removal Procedure", # PP-2.5.5.4-05, Rev E dated 07/15/2016. Special Working Conditions Required (e.g., Industrial Hygiene hold points or other monitoring) None Notifications to operations and Operational Limits Requirements: None Post Work Testing, Notification or Documentation Required: See Attached Plan Job Safety Analysis Required: ☐ Yes ☒ No Review Done: 
☐ in series ☐ team Reviewed by: \* Primary Reviewer signature (not required for Worker Planned Work) means that the Review Team members were appropriate for the work that was planned, the Team visited the job site, hazards and risks that could impact ESSH have been considered and controls established according to BNL requirements. In addition, this signature indicates that applicable JRAs, FRAs, as well as other planning documents have been reviewed and training requirements have been identified and recorded on this permit. Name (print) Life # Date Title Signature **ES&H Professional** F&O Facility Project Manager Service Provider Work Control Coordinator Don Lynch 20146 Safety Health Representative Research Space Manager Other Required Walkdown Completed \*Primary Reviewer 4. Job site personnel (Supervisor and workers) fill out this section. Note: Signature indicates personnel performing work have read and understand the hazards and permit requirements (including any attachments) and all training required for this permit is current/complete. Job Supervisor/Contractor Supervisor signatures also includes verification that worker training required for this permit is current/complete. Job Supervisor: Contractor Supervisor: Life#: Life#: Workers: Workers : Workers are encouraged to provide feedback on ESSH concerns or on ideas for improved job work flow. Use feedback form or space below. 5. Department/Division, or their equivalent, Line Manager or Designee Conditions are appropriate to start work: (Permit has been reviewed, work controls are in place and site is ready for job.) Name: Signature: Date: 6. Worker provides feedback. Worker Feedback (use attached sheets as necessary) WCM/WCC: Are there any changes as a result of worker feedback? ☐ Yes ☐ No Note: See Work Planning and Control for Experiments and Operations Subject Area section 2.6. 7. Post Job Review/Closeout: Work Control Coordinator (authorizing dept.) checks quality of completed permit and ensures the work site is left in an acceptable condition. (WCC can delegate clean up of job site to work supervisor.) The WCC ensures that the change process to update drawings, placards, postings, procedures, etc., is initiated, if necessary. Signature: Life#: Date: Comments: